



Standard Operating Procedure Refuse Disposal Division



Groundwater Monitoring

Slow Recharge Well Sampling Method

A well is considered to be slow recharging if recovery to 80 percent of its static water level takes longer than two hours. The following procedures are acceptable when purging and sampling a slow recharging well.

1. Well purging to “dryness,” though in some cases unavoidable, is not recommended because cascading water may occur during recharge and cause the loss of volatile organic constituents. Use the proper purge volume settings documented for each well.
2. Conduct field water-quality measurements (temperature, pH, and specific conductance) every $\frac{1}{2}$ borehole volume; turn off pH meter after each reading.
3. Remove one (1) borehole volume of water.
4. Collect a sample no later than two hours after purging, or as soon as enough water is present to sample. ***Note** – If the well recovers to greater than 80% in less than two hours, it is a fast recharging well. If so, review and follow the fast recharging well procedure.
5. Retest the well for pH, temperature and specific conductance after sampling as a measure of purging efficiency and as a check on the stability of the water samples over time.

Environmental Management System (EMS) –ISO 14001

PROCESS MAP #: GW-1.1

Benefit of Compliance to Instruction:

- Ensures consistency in all readings
- Compliance with Regulatory guidelines
- Provides proper QA/ QC for all wells sampled
- Allows for a consistent, reliable, historical record of analytical results
- Identifies impacts to groundwater

Consequence of Non-Compliance to Instruction:

- Inaccurate readings
- Useless data that must be sampled again
- Resampling and analysis cost overruns
- Disciplinary action
- Impacts to groundwater not identified in timely fashion

Reviewed by: Mark zu Hone, *EMR*

Approved by: Ray Purtee, *Senior Mechanical Engineer*

Date: July 2, 2001

The on-line version and secured hardcopy are the controlled documents. The secured hardcopy will be identified by a “Controlled Copy” stamp (in red) and RDD Deputy Director signature. Any other documents are uncontrolled. Verify revision level status on-line or contact the EMR.